

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK**

<p>SIGNIFY NORTH AMERICA CORPORATION and SIGNIFY HOLDING B.V.,</p> <p style="text-align: center;">Plaintiffs,</p> <p style="text-align: center;">vs.</p> <p>REGGIANI LIGHTING USA, INC. and REGGIANI S.P.A. ILLUMINAZIONE,</p> <p style="text-align: center;">Defendants.</p>		<p>Civil Action No. 1:18-cv-11098-ER <u>JURY TRIAL DEMANDED</u></p>
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**REGGIANI LIGHTING USA, INC.’S and REGGIANI S.P.A.
ILLUMINAZIONE’S SECOND AMENDED ANSWER, DEFENSES AND
COUNTERCLAIMS**

Pursuant to Federal Rule of Civil Procedure 15(a)(1)(B), Defendants Reggiani Lighting USA, Inc., and Reggiani S.p.A. Illuminazione (collectively “Reggiani”), through their attorneys, hereby amend their First Amended Answer, Defenses, and Counterclaims filed April 17, 2019, and answer the Amended Complaint of Plaintiffs Signify North America Corporation and Signify Holding B.V. (collectively, “Signify”) by corresponding paragraph as follows.¹ Every allegation not expressly admitted is denied.

NATURE OF THE ACTION

1. Reggiani admits that Signify asserts claims for alleged patent infringement arising under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*, including 35 U.S.C. § 271.

¹ To avoid confusion, underlined material indicates amendments to Reggiani’s original Answer, Defenses, and Counterclaims filed March 22, 2019.

Reggiani denies the remaining allegations of this paragraph, and denies that it infringes any valid patent claims asserted in this action or that Signify is entitled to any relief in this action.

THE PARTIES

2. Reggiani lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 2 and on that basis denies them.

3. Reggiani lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 3 and on that basis denies them.

4. Admitted that Reggiani Lighting USA, Inc. is a corporation organized and existing under the laws the State of New York and has a place of business at 372 Starke Road, Carlstadt, New Jersey 07072.

5. Admitted that Reggiani S.p.A. Illuminazione is a corporation organized and existing under the laws of Italy and has a place of business at Viale Monza 16, 20845 Sovico MB, Italy.

JURISDICTION AND VENUE

6. Reggiani admits that this action purports to arise under the patent laws of the United States and that this Court has subject-matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338. Reggiani denies that there is any factual or legal basis for any of Signify's claims in this action.

7. Reggiani admits that Reggiani Lighting USA, Inc., is incorporated in New York and does not contest that this Court has personal jurisdiction over Reggiani Lighting USA for purposes of this action. Reggiani denies the remaining allegations in Paragraph 7, except that

Reggiani S.p.A. Illuminazione consents to personal jurisdiction in this Court for purposes of this action but otherwise denies that it is subject to personal jurisdiction in this Court.

8. Denied.

9. Reggiani admits that Reggiani Lighting USA's website provides a link to a document entitled "General Terms And Conditions Of Sales And Delivery" which states "These general terms and conditions of sale and delivery serve as basis for all contracts on the sale of goods by and between Reggiani S.p.A. Illuminazione, Sovico, -ITALY (hereinafter referred to as "Vendor") and its customers (hereinafter referred to as "Customer")" and a link to a document entitled "Warranty conditions for LED light source" which states "Warranty conditions offered by Reggiani S.p.A. Illuminazione for the supply of products that use a LED LUCE light source." Reggiani denies the remaining allegations of Paragraph 9.

10. Admitted that Reggiani Lighting USA is a New York corporation and Reggiani S.p.A. Illuminazione is a foreign corporation. For purposes of this action Reggiani does not contest that venue is proper in this Court. Reggiani denies the remaining allegations of Paragraph 10 including that Reggiani has committed acts of patent infringement in this District.

THE PATENTS IN SUIT

11. Reggiani lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 11, and on that basis denies them.

12. Reggiani lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 12, and on that basis denies them.

13. Reggiani admits that U.S. Patent 7,348,604 (the "'604 patent") is entitled "Light-emitting Module," and bears an issue date of March 25, 2008. Reggiani denies that the '604 patent

was duly and legally issued by the United States Patent Office. Reggiani lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 13, and on that basis denies them.

14. Reggiani admits that U.S. Patent 7,352,138 (the “’138 patent”) is entitled “Methods and apparatus for providing power to lighting devices,” and bears an issue date of April 1, 2008. Reggiani denies that the ’138 patent was duly and legally issued by the United States Patent Office. Reggiani lacks knowledge or information sufficient to form a belief as to the truth of the allegations of the remaining allegations of Paragraph 14, and on that basis denies them.

15. Reggiani admits that U.S. Patent 7,766,518 (the “’518 patent”) is entitled “LED-based light-generating modules for socket engagement, and methods of assembling, installing and removing same,” and bears an issue date of August 3, 2010. Reggiani denies that the ’518 patent was duly and legally issued by the United States Patent Office. Reggiani lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 15, and on that basis denies them.

16. Reggiani admits that U.S. Patent 8,070,328 (the “’328 patent”) is entitled “LED downlight” and bears an issue date of December 26, 2011. Reggiani denies that the ’328 patent was duly and legally issued by the United States Patent Office. Reggiani lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 16, and on that basis denies them.

17. Reggiani admits that U.S. Patent 7,262,559 (the “’559 patent”) is entitled “LEDs driver” and bears an issue date of August 28, 2007. Reggiani denies that the ’559 patent was duly and legally issued by the United States Patent Office. Reggiani lacks knowledge or information

sufficient to form a belief as to the truth of the remaining allegations of Paragraph 17, and on that basis denies them.

COUNT ONE

ALLEGED INFRINGEMENT OF U.S. PATENT NO. 7,348,604

18. Reggiani restates incorporates by reference its answers to the allegations in paragraphs 1-17 as if fully set forth herein.

19. Denied.

20. Admitted that paragraph 20 purports to set forth the text of Claim 1 of the '604 patent. Otherwise denied.

21. Denied.

22. The allegations in Paragraph 22 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '604 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 22, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '604 patent.

23. The allegations in Paragraph 23 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '604 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 23, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '604 patent.

24. The allegations in Paragraph 24 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '604 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 24, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '604 patent.

25. Denied.

26. The allegations in Paragraph 26 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '604 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 26, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '604 patent.

27. The allegations in Paragraph 27 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '604 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 27, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '604 patent.

28. The allegations in Paragraph 28 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '604 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph

28, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '604 patent.

29. Denied.

30. Denied.

31. Denied.

32. Denied.

33. Denied.

COUNT TWO

ALLEGED INFRINGEMENT OF U.S. PATENT NO. 7,352,138

34. Reggiani restates and incorporates by reference its answers to the allegations in paragraphs 1-33 as if fully set forth herein.

35. Denied.

36. Admitted that paragraph 36 purports to set forth the text of Claim 1 of the '138 patent. Otherwise denied.

37. Denied.

38. Reggiani admits that the H60 driver may be used with certain types of dimmer circuits. Reggiani lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 38, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

39. Reggiani admits that Reggiani Lighting USA sells some lighting fixtures which include H60 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani lacks sufficient knowledge or information to form a belief about the truth of the

remaining allegations in Paragraph 39, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

40. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H60 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations of Paragraph 40, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

41. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H60 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H60 drivers and, furthermore, the allegations in Paragraph 41 apply claim language of the '138 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 41, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

42. Denied.

43. Reggiani admits that the H03 driver may be used with certain types of dimmer circuits. Reggiani lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 43, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

44. Reggiani admits that Reggiani Lighting USA sells some lighting fixtures which include H03 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses,

sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 44, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

45. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H03 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations of Paragraph 45, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

46. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H03 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H03 drivers and, furthermore, the allegations in Paragraph 46 apply claim language of the '138 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 46, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

47. Denied.

48. Reggiani admits that the H01 driver may be used with certain types of dimmer circuits. Reggiani lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 48, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

49. Reggiani admits that Reggiani Lighting USA sells some lighting fixtures which include H01 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 49, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

50. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H01 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations of Paragraph 50, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

51. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H01 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H01 drivers and, furthermore, the allegations in Paragraph 51 apply claim language of the '138 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 51, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

52. Denied.

53. Reggiani admits that the L32 driver may be used with certain types of dimmer circuits. Reggiani lacks sufficient knowledge or information to form a belief about the truth of

the remaining allegations in Paragraph 53, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

54. Reggiani admits that Reggiani Lighting USA sells some lighting fixtures which include L32 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 54, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

55. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include L32 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 55, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '138 patent.

56. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include L32 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture L32 drivers and, furthermore, the allegations in Paragraph 56 apply claim language of the '138 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 56, and therefore denies them.

57. Denied.

58. Denied.

59. Denied.

60. Denied.

COUNT THREE

ALLEGED INFRINGEMENT OF U.S. PATENT NO. 7,766,518

61. Reggiani restates and incorporates by reference its answers to the allegations in paragraphs 1-60 as if fully set forth herein.

62. Denied.

63. Admitted that paragraph 63 purports to set forth the text of Claim 1 of the '518 patent. Otherwise denied.

64. Denied.

65. The allegations in Paragraph 65 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '518 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 65, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '518 patent.

66. Denied

67. Denied.

68. Denied.

69. Denied.

70. Denied.

71. Denied.

72. Denied.

73. Denied.

COUNT FOUR

ALLEGED INFRINGEMENT OF U.S. PATENT NO. 8,070,328

74. Reggiani restates and incorporates by reference its answers to the allegations in paragraphs 1-73 as if fully set forth herein.

75. Denied.

76. Admitted that paragraph 76 purports to set forth the text of Claim 1 of the '328 patent. Otherwise denied.

77. Denied.

78. The allegations in Paragraph 78 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '328 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 78, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '328 patent.

79. The allegations in Paragraph 79 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '328 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 79, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '328 patent.

80. Denied.

81. Denied.

82. Denied.

83. The allegations in Paragraph 83 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '328 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 83, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '328 patent.

84. The allegations in Paragraph 84 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '328 patent for which the Court has not issued a claim construction and for which they provide no context. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 84, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '328 patent.

85. Denied.

86. Denied.

87. Denied.

88. The allegations in Paragraph 88 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '328 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 88, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '328 patent.

89. The allegations in Paragraph 89 refer generally to various photographs showing portions of lighting fixtures bearing no identification. Furthermore, they apply claim language of the '328 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 89, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '328 patent.

90. Denied.

91. Denied

92. Denied.

93. Denied.

94. Denied.

95. Denied.

96. Denied.

COUNT FIVE

ALLEGED INFRINGEMENT OF U.S. PATENT NO. 7,262,559

97. Reggiani restates and incorporates by reference its answers to the allegations in paragraphs 1-96 as if fully set forth herein.

98. Denied.

99. Admitted that paragraph 99 purports to set forth the text of Claim 11 of the '559 patent. Otherwise denied.

100. Denied.

101. Reggiani lacks sufficient knowledge or information to form a belief about the truth of the allegations in Paragraph 101, and therefore denies them.

102. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H03 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H03 drivers and, furthermore, the allegations in Paragraph 102 apply claim language of the '559 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 102, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '559 patent.

103. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H03 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H03 drivers and, furthermore, the allegations in Paragraph 103 apply claim language of the '559 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 103, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '559 patent.

104. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H03 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H03 drivers, and furthermore, the allegations in Paragraph 104 apply claim language of the '559 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the

truth of the remaining allegations in Paragraph 104, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '559 patent.

105. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H03 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H03 drivers, and furthermore, the allegations in Paragraph 105 apply claim language of the '559 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 105, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '559 patent.

106. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H03 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H03 drivers, and furthermore, the allegations in Paragraph 106 apply claim language of the '559 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 106, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '559 patent.

107. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H01 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H01 drivers and, furthermore, the allegations in Paragraph 107 apply claim language of the '559 patent for which the Court has not issued a claim

construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 107, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '559 patent.

108. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H01 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H01 drivers, and furthermore, the allegations in Paragraph 108 apply claim language of the '559 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 108, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '559 patent.

109. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H01 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H01 drivers, and furthermore, the allegations in Paragraph 109 apply claim language of the '559 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 109, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '559 patent.

110. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H01 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H01 drivers and furthermore, the allegations in

Paragraph 110 apply claim language of the '559 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 110, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '559 patent.

111. Reggiani admits that Reggiani Lighting USA sells some LED lighting fixtures which include H01 drivers. Reggiani denies that Reggiani S.p.A. Illuminazione manufactures, uses, sells, offers for sale in the U.S. or imports into the U.S. any lighting fixtures that include drivers. Reggiani does not manufacture H01 drivers and, furthermore, the allegations in Paragraph 111 apply claim language of the '559 patent for which the Court has not issued a claim construction. Reggiani thus lacks sufficient knowledge or information to form a belief about the truth of the remaining allegations in Paragraph 111, and therefore denies them. Reggiani further states that it does not infringe any valid claim of the '559 patent.

112. Denied.

113. Denied.

114. Denied.

115. Denied.

RESPONSE TO PRAYER FOR RELIEF

Reggiani denies that Signify is entitled to any relief whatsoever, whether as sought in the Prayer for Relief of the Amended Complaint or otherwise, in connection with this action.

DEFENDANT'S AFFIRMATIVE DEFENSES

Defendant Reggiani asserts the following affirmative defenses to Signify's Amended Complaint. Reggiani alleges that it cannot fully anticipate all affirmative defenses that may be applicable to this action. Accordingly, Reggiani hereby reserves the right to assert additional affirmative defenses based on information subsequently acquired through discovery and investigation or amendment of the complaint or otherwise, if and to the extent such defenses are applicable.

FIRST AFFIRMATIVE DEFENSE

(Noninfringement)

Reggiani does not infringe and has not infringed, induced infringement of, or contributed to the infringement of any valid and enforceable claim of the '604, '138, '518, '328, and '559 patents (collectively, the "patents in suit"), either literally or under the doctrine of equivalents.

SECOND AFFIRMATIVE DEFENSE

(Invalidity)

Each asserted claim of the patents in suit is invalid for failure to comply with one or more of the requirements of the United States Code, Title 35, including without limitation, 35 U.S.C. §§ 101, 102, 103, and 112, and the rules, regulations, and laws pertaining thereto.

THIRD AFFIRMATIVE DEFENSE

(Prosecution History Estoppel, Disclaimer and Dedication to the Public)

The claims of the patents in suit are not entitled to a scope sufficient to encompass any system employed or process practiced by Reggiani. Under the doctrines of prosecution history estoppel, disclaimer and dedication to the public, Signify is estopped from asserting that the claims of the patents in suit can be construed as covering any activity of Reggiani due to the

limiting nature of statements, representations, and amendments made during the prosecution of the patents in suit and any re-examination certificate.

FOURTH AFFIRMATIVE DEFENSE

(Limitations on Damages and Costs)

To the extent Signify or any of its predecessors have failed to properly mark any of their relevant products or materials incorporating the technology claimed in the patents in suit as required by 35 U.S.C. § 287, or otherwise to give proper notice that Reggiani's actions allegedly infringe the patents in suit, Reggiani is not liable to Plaintiff for the acts alleged to have been performed before it received actual notice that it was allegedly infringing the patents in suit. Signify is further barred by 35 U.S.C. § 288 from recovering any costs associated with this civil action. To the extent Signify seeks damages for alleged infringement of the '604, '138, '518, and '328 patents more than six years prior to the filing of the Complaint in this civil action, its claims are also barred by the statute of limitations under 35 U.S.C. § 286; and to the extent Signify seeks damages for alleged infringement of the '559 patent more than six years prior to the filing of the First Amended Complaint in this civil action, its claims are also barred by the statute of limitations under 35 U.S.C. § 286.

FIFTH AFFIRMATIVE DEFENSE

(Unenforceability for Patent Misuse and Unclean Hands)

Signify is barred from any relief in this action, and the patents in suit are unenforceable under the doctrine of unclean hands and/or patent misuse.

SIXTH AFFIRMATIVE DEFENSE

(No Entitlement to Injunctive Relief)

Signify is not entitled to any injunctive relief as a matter of law, because, at a minimum, Signify cannot satisfy the legal requirements for such relief and Signify has an adequate remedy at law. Signify has a wide licensing program that includes over 900 licensees to the patents in suit. See <https://www.signify.com/global/our-company/intellectual-property/licensing/led-based-luminaires-and-retrofit-bulbs>. At least because of that program, Signify will be unable to establish that (1) it has suffered any injury, let alone an irreparable injury; (2) remedies available at law, such as monetary damages, would be inadequate to compensate for any injury; (3) considering the balance of hardships between Signify and Reggiani, a remedy in equity is warranted; and (4) the public interest would not be disserved by a permanent injunction.

SEVENTH AFFIRMATIVE DEFENSE

(License and Exhaustion)

Signify is precluded from asserting infringement and recovering damages as to any products that are licensed or as to which a royalty already has been paid, including, without limitation, any products obtained from a licensed Signify entity or third party.

EIGHTH AFFIRMATIVE DEFENSE

(Failure to State a Claim)

The Complaint fails to state any claims upon which relief can be granted.

NINTH AFFIRMATIVE DEFENSE

(Failure to Mitigate Damages)

Signify's claims are barred by its failure to mitigate damages. In the alternative, Signify's recovery, if any, must be reduced by those damages that Signify failed to mitigate, by virtue of its own acts or omissions and/or omissions of others chargeable to Signify.

TENTH AFFIRMATIVE DEFENSE

(Unenforceability for Inequitable Conduct)

On information and belief, at least the '138 and '559 patents are unenforceable due to inequitable conduct in failing to disclose material prior art to the United States Patent Office during prosecution of the applications that led to the '138 and '559 patents with specific intent to deceive the Patent Office.

The '138 Patent

During prosecution of the application that led to the '138 patent, persons associated with the filing and prosecution of that patent application, including named inventors Ihor A. Lys, one of the founders of Color Kinetics Incorporated (which was acquired by Signify – then Philips Solid-State Lighting Solutions – in 2007), Frederick M. Morgan, Color Kinetics' Chief Technical Officer and one of Color Kinetics' original core engineering team, and/or prosecution counsel, including Joseph Teja, Color Kinetics' outside patent strategy and prosecution counsel, withheld from the United States Patent Office at least PCT International Publication No. WO 99/31560 (the "WO 99/31560 publication"). That publication was published on June 24, 1999, and is prior art to the '138 patent under 35 U.S.C. § 102(b) because it was published more than one year prior to the '138 patent's earliest priority date.

Claim 1 of the '138 patent recites:

An illumination apparatus, comprising:

at least one LED; and

at least one controller coupled to the at least one LED and configured to receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage, the at least one controller further configured to provide power to the at least one LED based on the power-related signal.

At least to the extent Signify claims that Reggiani's products infringe claim 1 of the '138 patent, the WO 99/31560 publication describes "an illumination apparatus having at least one LED and at least one controller coupled to the at least one LED and configured to receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage, the at least one controller further configured to provide power to the at least one LED based on the power-related signal." See, e.g., WO 99/31560 at pages 30-34 and Figures 6-14. For example, the WO 99/31560 publication *inter alia* discloses or renders obvious the limitation that the "controller" be "configured to receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage." See, e.g., WO 99/31560 at pages 30-34, and Figures 6-14. During the prosecution of the application that led to the '138 patent, Applicants argued, and the Examiner agreed, that this limitation was missing from the prior art raised by the Examiner. Thus, the WO 99/31560 publication would have been but-for material to the examination of the application that led to the '138 patent because by itself or in combination with other information known in the art it expressly or inherently discloses each limitation of at least claim 1 of the '138 patent, and renders the subject matter claimed in the '138 patent anticipated or obvious. Therefore, the United States Patent Office would not have allowed at least claim 1 of the '138 patent to issue had it been aware of the WO 99/31560 publication.

The WO 99/31560 publication is not cumulative of the prior art of record in the prosecution of the patent application that issued as the '138 patent. Although issued patents from the same family were disclosed in Information Disclosure Statements submitted by the Applicant, these were buried in over 400 other references cited, were published after the filing date of the '138 patent, were not 35 U.S.C. § 102(b) prior art, and thus would have been easily overlooked by the Examiner, also because, as Signify noted during the May 9, 2019 hearing, the disclosure is voluminous. See May 9, 2019, Hearing Transcript at 8:23.

On information and belief, persons involved with the prosecution of the '138 patent, including Color Kinetics founder Lys, CTO Morgan, and patent strategy and prosecution counsel Teja were aware of the WO 99/31560 publication at least because Messrs. Lys and Morgan are also named inventors on the WO 99/31560 publication. Furthermore, around the time of filing and during the pendency of the application that led to the '138 patent, the WO 99/31560 publication was cited in Information Disclosure Statements submitted during the prosecution of multiple patent applications for which Messrs. Lys and/or Morgan applied as named inventors and which were prosecuted by the same patent attorney, Joseph Teja. See, e.g., U.S. Patent Nos. 7,139,617 and 7,809,448. The WO 99/31560 publication was also specifically referred to and incorporated by reference into the disclosure of a short U.S. patent on which Mr. Lys is the sole named inventor and for which Mr. Teja was also the prosecuting attorney. See U.S. Patent No. 6,969,954, col. 2, lines 26-31.

On information and belief, persons involved with the prosecution of the '138 patent, including Color Kinetics founder Lys, CTO Morgan and/or patent strategy and prosecution counsel, Mr. Teja, withheld the WO 99/31560 publication from the United States Patent Office with specific deceptive intent in order to obtain impermissibly broader and longer patent

protection. On information and belief, at and around the time of the preparation and filing of the application that led to the '138 patent and the patent applications from which the '138 patent claims priority, Messrs. Lys, Morgan and/or Teja were involved in devising a patent strategy to broadly cover the LED retrofit market and to broaden and lengthen the patent coverage of Color Kinetics' original technology relating to LED lighting. On information and belief, Messrs. Lys, Morgan and/or Teja withheld the WO 99/31560 publication with the specific intent to deceive the United States Patent Office and continued to intentionally withhold the WO 99/31560 publication with specific intent to deceive after Signify acquired Color Kinetics (before the '138 patent issued) because issuance of the '138 patent and its related patents, among others, was integral to Signify's ability to exploit the LED retrofit market.

The '559 Patent

During prosecution of the application that led to the '559 patent, persons associated with the filing and prosecution of that patent application, including named inventors Ajay Tripathi and Bernd Clauberg, and/or Signify in-house prosecution counsel, including Robert J. Kraus, withheld from the United States Patent Office at least U.S. Patent Application Publication No. US 2002/0176262 ("the US 2002/0176262 publication") with specific deceptive intent. That publication was published on November 28, 2002, and is prior art to the '559 patent under both 35 U.S.C. §§ 102(a) and 102(e) because it was published prior to the '559 patent's earliest priority date. The US 2002/0176262 publication would have been material to the examination of the application that led to the '559 patent because by itself or in combination with other information known in the art expressly or inherently discloses each limitation of at least claim 11 of the '559 patent and renders the subject matter claimed in the '559 patent anticipated or obvious.

Claim 11 of the '559 patent recites:

A power supply for an LED light source, said power supply comprising:

a power converter operable to provide a regulated power including a LED current and a LED voltage;

an LED control switch operable to control a flow of the LED current through the LED light source; and

a voltage sensor operable to sense the LED voltage applied to the LED light source, said voltage sensor including

an [sic] differential amplifier, and

means for adjusting a gain of said differential amplifier,

wherein said LED control switch is further operable to clamp a peak of the LED current during an initial loading stage of the LED light source.

At least to the extent Signify claims that Reggiani's products infringe claim 11 of the '559 patent, the US 2002/0176262 publication discloses each limitation of claim 11 in, *inter alia*, abstract, Figs. 2 and 3, and paragraphs [0016] – [0024]. The US 2002/0176262 publication is directed to a “power supply for an LED light source which comprises a power converter operable to provide regulated power to LEDs including LED current and LED voltage.” *See, e.g.*, Figs. 2 and 3, and paragraphs [0016] – [0024]. The power supply disclosed in the US 2002/0176262 publication also includes “a switch operable to control a flow of LED current through the LED light source.” *See, e.g.*, Fig. 3 and paragraphs [0016] – [0024]. The power supply disclosed in the US 2002/0176262 publication also includes “a voltage sensor operable to sense the LED voltage applied to the LED light source, said voltage sensor including an [sic] differential amplifier, and means for adjusting a gain of said differential amplifier.” *See, e.g.*, Fig. 3 and paragraphs [0016] – [0024]. Finally, the “LED control switch is further operable to clamp a peak of the LED current during an initial loading stage of the LED light source.” *See, e.g.*, Fig. 3 and paragraphs [0016] – [0024]. During the prosecution of the application that led to the '559 patent, Applicants argued, and the Examiner agreed, that the claimed limitations, including “power

converter,” “LED control switch,” and “voltage senses including an [sic] differential amplifier and means for adjusting a gain of the differential amplifier,” were missing from the prior art raised by the Examiner. Thus, the US 2002/0176262 publication would have been but-for material to the examination of the application that led to the ’559 patent because by itself or in combination with other information known in the art expressly or inherently discloses each limitation of at least claim 11 of the ’559 patent, and renders the subject matter claimed in the ’559 patent anticipated or obvious. Therefore, the United States Patent Office would not have allowed at least claim 11 of the ’559 patent to issue had it been aware of the US 2002/0176262 publication. The US 2002/0176262 publication is also not cumulative to the art before the Examiner during the prosecution of the ’559 patent.

On information and belief, persons involved with the prosecution of the ’559 patent, including Mr. Tripathi, Mr. Clauberg, and/or Signify in-house prosecution counsel, including Mr. Kraus, were aware of the US 2002/0176262 publication, at least because it shares two inventors with the ’559 patent, namely Mr. Tripathi and Mr. Clauberg, and also shares portions of its disclosure with the ’559 patent. For example, column 1 of the ’559 patent includes paragraphs [0001], [0002], [0004], [0005] of the US 2002/0176262 publication and a substantial portion of Figure 3 verbatim in its disclosure. On information and belief at the time of the filing and prosecution of the patent application that led to the ’559 patent, Signify – then Philips Solid State Lighting Solutions – was also devising a patent strategy to cover the LED retrofit market. On information and belief, at least Signify’s in-house counsel responsible for prosecuting the application that led to the ’559 patent also intentionally withheld additional material references from the United States Patent Office during the prosecution of the application that issued as the ’559 patent. For example, Signify failed to accurately disclose to the United States Patent Office

references raised by the European Patent Office against patentability in the prosecution of the European counterparts of the '559 patent, as well as references raised as novelty-destroying in the International Search Report for the International Application counterpart of the US 2002/0176262 publication, WO 02/096162 A1 (also published on November 28, 2002, with the Search Report), thus engaging in a pattern of lack of candor. Thus, on information and belief, persons involved with the prosecution of the '559 patent, including Mr. Tripathi, Mr. Clauberg, and/or Signify in-house prosecution counsel, including Mr. Kraus, withheld U.S. Patent Application Publication No. US 2002/0176262 from the United States Patent Office with the specific intent to deceive the United States Patent Office in order to obtain impermissibly broad coverage because obtaining broader and longer patent coverage would be integral to its patent strategy.

Reggiani's investigation is ongoing. Reggiani believes that through discovery it will uncover additional evidence confirming, supporting, and/or explaining Signify's deceptive intent and it reserves the right to make additional contentions regarding the unenforceability of the patents in suit consistent with the Federal Rules of Civil Procedure, the local rules and any schedule entered in this action.

COUNTERCLAIMS

For its counterclaims against Signify, Reggiani alleges as follows:

PARTIES

1. Reggiani Lighting USA, Inc., is a corporation organized and existing under the laws of the State of New York with its principal place of business at 372 Starke Road, Carlstadt, New Jersey, 07072.

2. Reggiani S.p.A. Illuminazione is a corporation organized and existing under the laws of Italy with its principal place of business at Viale Monza 16, 20845 Sovico MB, Italy.

3. Upon information and belief, Signify North America Corporation is a corporation organized and existing under the laws of Delaware with its principal place of business at 200 Franklin Square Drive, Somerset, New Jersey, 08873.

4. Upon information and belief, Signify Holding B.V. is a corporation organized and existing under the laws of the Netherlands with its registered office at High Tech Campus 48, 5656 AE Eindhoven, The Netherlands.

JURISDICTION AND VENUE

5. This Court has subject matter jurisdiction over these counterclaims pursuant to 28 U.S.C. §§ 1331, 1338, 2201 and/or 2202 and Rule 13 of the Federal Rules of Civil Procedure.

6. By filing its Complaint and Amended Complaint and prosecuting its action in this Court, Signify has consented to the personal jurisdiction of this Court.

7. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391(b).

BACKGROUND

8. Reggiani is a small family owned company founded in 1957 by Goffredo Reggiani and focused on providing innovative luminaires.

9. Reggiani was part of what is known as the Italian design renaissance that took place in the middle of the last century. Since its inception, Reggiani has focused on lighting and has pioneered innovative technologies for every type of illumination, from wall sconces to track lights, some of which have become international standards. Today, it is recognized internationally in the architectural and lighting industry for its innovative approach to lighting and lighting design, and is at the forefront of LED lighting.

10. Over the years, Reggiani has received numerous acknowledgements and awards for its innovative lighting solutions, including for example its “Downspot,” and “Bisio”

luminaires. The Downspot was debuted in the late 1980's and is recognized as the first fully adjustable recessed electric luminaire.

11. Reggiani is also internationally recognized for its IOS or Interchangeable Optical System, an interchangeable reflector system. Reggiani's IOS was created by Fabio Reggiani as a result of substantial investment in research and was launched worldwide in 2005. It is considered the first interchangeable optical system in which the optics are entirely separate from the lighting fixture and may be easily changed without replacing the entire lighting fixture to create the desired lighting. Since its launch this system has been used in lighting fixtures of all types, including downlight fixtures.

COUNT ONE

(Declaration of Invalidity)

12. Reggiani incorporates by reference the allegations in paragraphs 1-11 as if fully set forth herein.

13. An actual justiciable controversy exists between Reggiani and Signify regarding the validity of the patents in suit, and that controversy is ripe for adjudication by this Court.

14. Signify contends that it is the assignee and owner of all right, title, and interest in the patents in suit, and that said patents were validly and legally issued by the United States Patent and Trademark Office.

15. The claims of the patents in suit are invalid for failing to satisfy one or more of the conditions of patentability set forth in Title 35, including, without limitation, §§ 101, 102, 103, and/or 112 and the rules, regulations and laws pertaining thereto.

16. For example, at least to the extent Signify claims that Reggiani's Roll IOS and Yori products infringe any claim of the '604 patent, prior art to the '604 patent, including but not

limited to German Patent No. DE20215834U1, U.S. Patent No. 6,045,240, U.S. Patent Application Pub. No. 2005/0053336, U.S. Patent No. 6,394,626, U.S. Patent No. 4,345,308, and U.S. Patent No. 5,857,767, expressly or inherently discloses each limitation of every claim of the '604 patent, and/or, alone or in combination with each other or with the knowledge of the person of skill in the art, renders the subject matter of each claim obvious to a person of ordinary skill in the art to which the claimed subject matter pertains at the time the alleged invention claimed in the '604 patent was made. Reggiani's investigation is ongoing and it reserves the right to make additional contentions regarding invalidity of the '604 patent consistent with the Federal Rules of Civil Procedure, the local rules and any schedule entered in this action.

17. For example, at least to the extent Signify claims that Reggiani's products infringe any claim of the '138 patent, prior art to the '138 Patent, including but not limited to, U.S. Patent No. 6,388,393, U.S. Patent No. 4,298,869, PCT International Publication No. WO 99/31560, and U.S. Patent Application Pub. No.: US 2002/0043943 A1, expressly or inherently, discloses each limitation of every claim of the '138 Patent, and/or alone or in combination with each other or with the knowledge of the person of skill in the art, renders the subject matter of each claim obvious to a person of ordinary skill in the art to which the claimed subject matter pertains at the time the alleged invention claimed in the '138 patent was made. Reggiani's investigation is ongoing and it reserves the right to make additional contentions regarding invalidity of the '138 patent consistent with the Federal Rules of Civil Procedure, the local rules and any schedule entered in this action.

18. For example, at least to the extent Signify claims that Reggiani's Roll IOS and Yori products infringe any claim of the '328 patent, prior art to the '328 patent including but not limited to U.S. Patent Application Pub. No. 2009/0067172A1 and U.S. Patent No. 6,033,093 as

well as the numerous lighting fixtures developed and sold by Reggiani using its Interchangeable Optical System (IOS) technology, such as the award-winning Bisio, expressly or inherently discloses each limitation of every claim of the '328 Patent, and/or alone or in combination with each other or with the knowledge of the person of skill in the art, renders the subject matter of each claim obvious to a person of ordinary skill in the art to which the claimed subject matter pertains at the time the alleged invention claimed in the '328 patent was made. Reggiani's investigation is ongoing and it reserves the right to make additional contentions regarding invalidity of the '328 patent consistent with the Federal Rules of Civil Procedure, the local rules and any schedule entered in this action.

19. For example, at least to the extent Signify claims that Reggiani's Cell products infringe any claim of the '518 patent, prior art to the '518 patent including but not limited to U.S. Patent No. 4,345,308, U.S. Patent No. 5,857,767, U.S. Patent No. 5,632,551, U.S. Patent No. 6,601,768 and/or European Patent No. EP1416219 B1 expressly or inherently disclose each limitation of every claim of the '518 Patent, and/or alone or in combination with each other or with the knowledge of the person of skill in the art, renders the subject matter of each claim obvious to a person of ordinary skill in the art to which the claimed subject matter pertains at the time the alleged invention claimed in the '518 patent was made. Reggiani's investigation is ongoing and it reserves the right to make additional contentions regarding invalidity of the '518 patent consistent with the Federal Rules of Civil Procedure, the local rules and any schedule entered in this action.

20. For example, at least to the extent Signify claims that Reggiani's products infringe any claim of the '559 patent, the prior art to the '559 Patent, including but not limited to U.S. Patent No. 6,577,512, U.S. Patent Application Publication No. US 2002/0176262, U.S. Patent No

6,166,496, U.S. Patent No. 4,955,069, U.S. Patent No. 6,351,080, the Linear Technology LT 1932 Constant Current LED Driver, and the Linear Technology LT 1300 Driver, expressly or inherently, discloses each and every claim limitation of the '559 Patent, and/or alone or in combination with each other or with the knowledge of the person of skill in the art, renders the subject matter of any such claim anticipated or obvious to a person of ordinary skill in the art to which the claimed subject matter pertains at the time the alleged invention claimed in the '559 patent was made. Reggiani's investigation is ongoing and it reserves the right to make additional contentions regarding invalidity of the '559 patent consistent with the Federal Rules of Civil Procedure, the local rules and any schedule entered in this action.

21. Accordingly, pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202, Reggiani seeks judgment from this Court declaring that the '604, '138, '518, '328, and '559 patents are invalid for failing to comply with the requirements of 35 U.S.C. §§ 1 *et seq.*, including without limitation, §§ 101, 102, 103, and/or 112.

COUNT TWO

(Declaration of Noninfringement)

22. Reggiani incorporates by reference the allegations in paragraphs 1-21 as if fully set forth herein.

23. Signify has sued Reggiani, accusing Reggiani of infringing the patents in suit. Reggiani denies that it has infringed any valid claims of the patents in suit, directly or indirectly, literally or under the doctrine of equivalents.

24. With respect to the '604 patent, for example, the accused Roll IOS and Yori products do not infringe any of the claims of the '604 patent either literally or under the doctrine of equivalents at least because they do not include a "housing element including fastening means

for detachably coupling the housing element to the heat dissipation element, said substrate being enclosed between the heat dissipation element and said housing element, said housing element including a transparent region enabling transmissions of light emitted by the one or more light-emitting elements therethrough” as set forth in claim 1, the only independent claim of the ’604 patent. Furthermore, none of the claims of the ’604 patent can be construed in any objectively reasonable manner that would encompass the accused products. Reggiani’s investigation is ongoing and it reserves the right to make additional contentions regarding non-infringement of the ’604 patent consistent with the Federal Rules of Civil Procedure, the local rules, and any schedule entered in this action, and in response to Signify’s Infringement Contentions.

25. With respect to the ’328 patent, for example, the accused Roll IOS and Yori products do not infringe any of the claims of the ’328 patent either literally or under the doctrine of equivalents at least because they do not include “a multipiece reflector assembly including... a second reflector having a first aperture positioned adjacent said second aperture of said first reflector and a second aperture opposite said first aperture of said second reflector...” or “a reflector assembly having . . . [a] second upper aperture of said second reflector aligned with said lower aperture of said first reflector,” or “a diffuser connected to one of said first reflector and said second reflector and disposed within said reflector assembly and in alignment with said second lower aperture of said first reflector and said first upper aperture of said second reflector” or “a lens disposed between said LED array and an uppermost edge of said reflector” as set forth in claims 1, 10, 16 and 19, respectively, the only independent claims of the ’328 patent. Furthermore, none of the claims of the ’328 patent can be construed in any objectively reasonable manner that would encompass the accused products. Reggiani’s investigation is ongoing and it reserves the right to make additional contentions regarding non-infringement of the ’328 patent

consistent with the Federal Rules of Civil Procedure, the local rules, and any schedule entered in this action, and in response to Signify's Infringement Contentions.

26. With respect to the '518 patent, for example, the accused Roll IOS and Yori products do not infringe any of the claims of the '518 patent either literally or under the doctrine of equivalents and least because they do not include "a plurality of secondary optical components; and a chassis coupled to the LED assembly and including a plurality of chambers in which the plurality of secondary optical components respectively are held," as required by claims 1 and 43, or "a thermally conductive chassis through which light exits from the apparatus," as required by claims 44 and 50, claims 1, 43, 44 and 50 being the only independent claims of the '518 patent. Furthermore, none of the claims of the '518 patent can be construed in any objectively reasonable manner that would encompass the accused products. Reggiani's investigation is ongoing and it reserves the right to make additional contentions regarding non-infringement of the '518 patent consistent with the Federal Rules of Civil Procedure, the local rules, and any schedule entered in this action, and in response to Signify's Infringement Contentions.

27. Furthermore, with respect to the '138 and '559 patents, for example, Reggiani S.p.A. Illuminazione, does not manufacture, use, sell, offer for sale or import into the U.S. any lighting fixtures that include drivers. Furthermore, Reggiani S.p.A. Illuminazione is not involved in Reggiani Lighting USA's selection of drivers to include in Reggiani S.p.A. Illuminazione fixtures sold to customers in the U.S. Thus Reggiani S.p.A. Illuminazione does not infringe any valid claim of the '559 and '138 patents directly or indirectly, literally or under the doctrine of equivalents.

28. With respect to the '138 and '559 patents, Reggiani Lighting USA does not manufacture drivers and does not have access to the technical details of the accused drivers. On

information and belief its products do not infringe any valid claim of the '138 and '559 patents. Reggiani's investigation is ongoing and it reserves the right to make additional contentions regarding non-infringement of the '138 and '559 patents consistent with the Federal Rules of Civil Procedure, the local rules, and any schedule entered in this action, and in response to Signify's Infringement Contentions.

29. An actual justiciable controversy exists between Reggiani and Signify regarding the alleged infringement of the '604, '138, '518, '328, and '559 patents, and that controversy is ripe for adjudication by this Court.

30. Accordingly, pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202, Reggiani seeks judgment from this Court declaring that it does not and has not directly or indirectly infringed, literally or under the doctrine of equivalents, any claim or claims, whether or not valid and enforceable, of the '604, '138, '518, '328, and '559 patents.

COUNT THREE

(Unenforceability for Patent Misuse)

31. Reggiani incorporates by reference the allegations in paragraphs 1-30 above and 43-55 below as if fully set forth herein.

32. Signify is barred from any relief in this action, and the patents in suit are unenforceable under the doctrine of ~~unclean hands~~ and/or patent misuse.

33. On information and belief, Signify is a multinational company, with billions in revenues from the lighting industry. Signify North America is a lighting company which produces components as well as lighting fixtures. It supplies components to, but also competes directly with Reggiani and other lighting fixture manufacturers.

34. On information and belief, starting in 2008, Signify has engaged in an aggressive licensing program to coerce licensing of the patents in suit and others, by using its marketplace power and its lighting patent portfolio, including the patents in suit, to leverage the licensing of these patents whether or not the patents are valid and whether or not the accused products are within the scope of the claims of the patents in suit.

35. Recently, Signify has brought numerous suits against lighting fixture manufacturers all of which have settled at the early stages of litigation. *See, e.g., Philips Lighting North America Corporation et al. v. Howard Industries Inc. d/b/a Howard Lighting*, Case No. 2:18-cv-12 (S.D. Miss.); *Philips Lighting North America Corporation et al v. Deco Enterprises, Inc. d/b/a Deco Lighting*, Case No. 2:17-cv-04995 (C.D. Cal.); *Philips Lighting North America Corporation et al. v. GVA Lighting, Inc.*, Case No. 1:16-cv-11640 (D. Mass.); *Philips Lighting North America Corporation et al. v. iKan International LLC*, 1:16-cv-10992 (D. Mass.); *Koninklijke Philips N.V. et al. v. Troy-CSL Lighting, Inc.*, Case No. 15-cv-11053 (D. Mass.); *Koninklijke Philips N.V. et al. v. Amerlux, LLC et al.*, Case No. 15-cv-13086 (D. Mass.); *Koninklijke Philips N.V. v. Iguzzini Lighting USA, Ltd. et al.*, Case No. 15-cv-3979 (S.D.N.Y.).

36. On information and belief, Signify only targets lighting fixture manufacturers, such as Reggiani, although many of its patents cover components, such as drivers, which are not manufactured by the lighting fixture manufacturers. On information and belief Signify chooses to target lighting fixture manufacturers because sales of final LED lighting fixture products are higher than sales of components, corresponding to higher royalties and because lighting fixture manufacturers for the most part are small companies which cannot easily afford litigation.

37. On information and belief, Signify demands licensing fees that far exceed any reasonable royalties it could recover under U.S. patent laws. Such licensing practices

impermissibly broaden the scope of patents and patent rights with anticompetitive effect and constitute patent misuse.

38. Signify's licensing program is described on its website at <https://www.signify.com/global/our-company/intellectual-property/licensing/led-based-luminaires-and-retrofit-bulbs> and is entitled the "EnabLED Licensing Program for LED Luminaires and Retrofit Bulbs." On its website Signify (and its predecessors before it) boasts of over 900 licensees, which on information and belief were acquired mainly through cease and desist letters threatening litigation.

39. In the July 18, 2018, listing of its patents available on the website, Signify lists 507 U.S. patents and applications, of which almost one fifth are expired (half of the expired patents and applications are provisional applications which expired almost a decade ago). Furthermore, on information and belief foreign counterparts of the some of the patents in suit have been revoked, withdrawn or allowed only with much more limited claims by the European Patent Office. For example, the European counterpart of the '138 patent was revoked by the European Patent Office, the European counterpart of the '559 patent was allowed only with much more limited claims, and the European counterpart application to the '604 patent is deemed withdrawn.²

40. On information and belief, and for the reasons stated in paragraphs 1-39 above and paragraphs 43-55 below, Signify filed this lawsuit knowing that the asserted patents are likely invalid and/or that Reggiani's products could not possibly infringe them, and thus filed it in bad faith and with an improper purpose of stifling competition in the market.

² Since the filing of Reggiani's Amended Answer, Signify has filed a response to the outstanding Official Action in the European counterpart application to the '604 patent and thus revived that application. However, in doing so it amended the claim 1 of the European counterpart application to the '604 patent (which is identical to claim 1 of the '604 patent asserted in the Complaint in this litigation) thus effectively admitting that the subject-matter of that claim is anticipated by the reference cited by the European Patent Office, German Patent No. DE20215834U1 (which is also prior art to the '604 patent).

41. On information and belief, and for the reasons stated in paragraphs 1-40 above and paragraphs 43-55 below, this lawsuit is another attempt by Signify to broaden its patent grant with anticompetitive effect. On information and belief, Signify is asserting patents it knows to be invalid and/or asserting unfounded grounds for infringement in bad faith in order to stifle competition in the market, thereby impermissibly broadening the subject matter and temporal scope of patents and patent rights with anticompetitive effect, thus constituting patent misuse.

42. Accordingly, pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202, Reggiani seeks judgment from this Court that the patents in suit are unenforceable for patent misuse.

COUNT FOUR

(Unenforceability for Inequitable Conduct)

43. Reggiani incorporates by reference the allegations in paragraphs 1-42 as if fully set forth herein.

44. On information and belief, at least the '138 and '559 patents are unenforceable due to inequitable conduct for withholding with specific intent to deceive material prior art from the United States Patent Office during prosecution of the applications that led to the '138 and '559 patents.

The '138 Patent

45. During prosecution of the application that led to the '138 patent, persons associated with the filing and prosecution of that patent application, including named inventors Ihor A. Lys, one of the founders of Color Kinetics Incorporated (which was acquired by Signify – then Philips Solid-State Lighting Solutions – in 2007), Frederick M. Morgan, Color Kinetics' Chief Technical Officer and one of Color Kinetics' original core engineering team, and/or prosecution counsel,

including Joseph Teja, Color Kinetics’ outside patent strategy and prosecution counsel, withheld from the United States Patent Office at least PCT International Publication No. WO 99/31560 (the “WO 99/31560 publication”). That publication was published on June 24, 1999, and is prior art to the ’138 patent under 35 U.S.C. § 102(b) because it was published more than one year prior to the ’138 patent’s earliest priority date.

46. Claim 1 of the ’138 patent recites:

An illumination apparatus, comprising:

at least one LED; and

at least one controller coupled to the at least one LED and configured to receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage, the at least one controller further configured to provide power to the at least one LED based on the power-related signal.

47. At least to the extent Signify claims that Reggiani’s products infringe claim 1 of the ’138 patent, the WO 99/31560 publication describes “an illumination apparatus having at least one LED and at least one controller coupled to the at least one LED and configured to receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage, the at least one controller further configured to provide power to the at least one LED based on the power-related signal.” See, e.g., WO 99/31560 at pages 30-34 and Figures 6-14. For example, the WO 99/31560 publication *inter alia* discloses or renders obvious the limitation that the “controller” be “configured to receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage.” See, e.g., WO 99/31560 at pages 30-34, and Figures 6-14. During the prosecution of the application that led to the ’138 patent, Applicants argued, and the Examiner agreed, that this limitation was missing from the prior art raised by the Examiner. Thus, the WO 99/31560

publication would have been but-for material to the examination of the application that led to the '138 patent because by itself or in combination with other information known in the art it expressly or inherently discloses each limitation of at least claim 1 of the '138 patent, and renders the subject matter claimed in the '138 patent anticipated or obvious. Therefore, the United States Patent Office would not have allowed at least claim 1 of the '138 patent to issue had it been aware of the WO 99/31560 publication.

48. The WO 99/31560 publication is not cumulative of the prior art of record in the prosecution of the patent application that issued as the '138 patent. Although issued patents from the same family were disclosed in Information Disclosure Statements submitted by the Applicant, these were buried in over 400 other references cited, were published after the filing date of the '138 patent, were not 35 U.S.C. § 102(b) prior art, and thus would have been easily overlooked by the Examiner, also because, as Signify noted during the May 9, 2019 hearing, the disclosure is voluminous. See May 9, 2019, Hearing Transcript at 8:23.

49. On information and belief, persons involved with the prosecution of the '138 patent, including Color Kinetics founder Lys, CTO Morgan, and patent strategy and prosecution counsel Teja were aware of the WO 99/31560 publication at least because Messrs. Lys and Morgan are also named inventors on the WO 99/31560 publication. Furthermore, around the time of filing and during the pendency of the application that led to the '138 patent, the WO 99/31560 publication was cited in Information Disclosure Statements submitted during the prosecution of multiple patent applications for which Messrs. Lys and/or Morgan applied as named inventors and which were prosecuted by the same patent attorney, Joseph Teja. See, e.g., U.S. Patent Nos. 7,139,617 and 7,809,448. The WO 99/31560 publication was also specifically referred to and incorporated by reference into the disclosure of a short U.S. patent on which Mr. Lys is the sole

named inventor and for which Mr. Teja was also the prosecuting attorney. See U.S. Patent No. 6,969,954, col. 2, lines 26-31.

50. On information and belief, persons involved with the prosecution of the '138 patent, including Color Kinetics founder Lys, CTO Morgan and/or patent strategy and prosecution counsel, Mr. Teja, withheld the WO 99/31560 publication from the United States Patent Office with specific deceptive intent in order to obtain impermissibly broader and longer patent protection. On information and belief, at and around the time of the preparation and filing of the application that led to the '138 patent and the patent applications from which the '138 patent claims priority, Messrs. Lys, Morgan and/or Teja were involved in devising a patent strategy to broadly cover the LED retrofit market and to broaden and lengthen the patent coverage of Color Kinetics' original technology relating to LED lighting. On information and belief, Messrs. Lys, Morgan and/or Teja withheld the WO 99/31560 publication with the specific intent to deceive the United States Patent Office and continued to intentionally withhold the WO 99/31560 publication with specific intent to deceive after Signify acquired Color Kinetics (before the '138 patent issued) because issuance of the '138 patent and its related patents, among others, was integral to Signify's ability to exploit the LED retrofit market.

The '559 Patent

51. During prosecution of the application that led to the '559 patent, persons associated with the filing and prosecution of that patent application, including named inventors Ajay Tripathi and Bernd Clauberg, and/or Signify in-house prosecution counsel, including Robert J. Kraus, withheld from the United States Patent Office at least U.S. Patent Application Publication No. US 2002/0176262 ("the US 2002/0176262 publication") with specific deceptive intent. That publication was published on November 28, 2002, and is prior art to the '559 patent under both

35 U.S.C. §§ 102(a) and 102(e) because it was published prior to the '559 patent's earliest priority date. The US 2002/0176262 publication would have been material to the examination of the application that led to the '559 patent because by itself or in combination with other information known in the art expressly or inherently discloses each limitation of at least claim 11 of the '559 patent and renders the subject matter claimed in the '559 patent anticipated or obvious.

52. Claim 11 of the '559 patent recites:

A power supply for an LED light source, said power supply comprising:

a power converter operable to provide a regulated power including a LED current and a LED voltage;

an LED control switch operable to control a flow of the LED current through the LED light source; and

a voltage sensor operable to sense the LED voltage applied to the LED light source, said voltage sensor including

an [sic] differential amplifier, and

means for adjusting a gain of said differential amplifier,

wherein said LED control switch is further operable to clamp a peak of the LED current during an initial loading stage of the LED light source.

53. At least to the extent Signify claims that Reggiani's products infringe claim 11 of the '559 patent, the US 2002/0176262 publication discloses each limitation of claim 11 in, *inter alia*, abstract, Figs. 2 and 3, and paragraphs [0016] – [0024]. The US 2002/0176262 publication is directed to a “power supply for an LED light source which comprises a power converter operable to provide regulated power to LEDs including LED current and LED voltage.” *See, e.g.*, Figs. 2 and 3, and paragraphs [0016] – [0024]. The power supply disclosed in the US 2002/0176262 publication also includes “a switch operable to control a flow of LED current through the LED light source.” *See, e.g.*, Fig. 3 and paragraphs [0016] – [0024]. The power supply disclosed in the US 2002/0176262 publication also includes “a voltage sensor operable to

sense the LED voltage applied to the LED light source, said voltage sensor including an [sic] differential amplifier, and means for adjusting a gain of said differential amplifier.” See, e.g., Fig. 3 and paragraphs [0016] – [0024]. Finally, the “LED control switch is further operable to clamp a peak of the LED current during an initial loading stage of the LED light source.” See, e.g., Fig. 3 and paragraphs [0016] – [0024]. During the prosecution of the application that led to the ’559 patent, Applicants argued, and the Examiner agreed, that the claimed limitations, including “power converter,” “LED control switch,” and “voltage senses including an [sic] differential amplifier and means for adjusting a gain of the differential amplifier,” were missing from the prior art raised by the Examiner. Thus, the US 2002/0176262 publication would have been but-for material to the examination of the application that led to the ’559 patent because by itself or in combination with other information known in the art expressly or inherently discloses each limitation of at least claim 11 of the ’559 patent, and renders the subject matter claimed in the ’559 patent anticipated or obvious. Therefore, the United States Patent Office would not have allowed at least claim 11 of the ’559 patent to issue had it been aware of the US 2002/0176262 publication. The US 2002/0176262 publication is also not cumulative to the art before the Examiner during the prosecution of the ’559 patent.

54. On information and belief, persons involved with the prosecution of the ’559 patent, including Mr. Tripathi, Mr. Clauberg, and/or Signify in-house prosecution counsel, including Mr. Kraus, were aware of the US 2002/0176262 publication, at least because it shares two inventors with the ’559 patent, namely Mr. Tripathi and Mr. Clauberg, and also shares portions of its disclosure with the ’559 patent. For example, column 1 of the ’559 patent includes paragraphs [0001], [0002], [0004], [0005] of the US 2002/0176262 publication and a substantial portion of Figure 3 verbatim in its disclosure. On information and belief at the time of the filing

and prosecution of the patent application that led to the '559 patent, Signify – then Philips Solid State Lighting Solutions – was also devising a patent strategy to cover the LED retrofit market. On information and belief, at least Signify's in-house counsel responsible for prosecuting the application that led to the '559 patent also intentionally withheld additional material references from the United States Patent Office during the prosecution of the application that issued as the '559 patent. For example, Signify failed to accurately disclose to the United States Patent Office references raised by the European Patent Office against patentability in the prosecution of the European counterparts of the '559 patent, as well as references raised as novelty-destroying in the International Search Report for the International Application counterpart of the US 2002/0176262 publication, WO 02/096162 A1 (also published on November 28, 2002, with the Search Report), thus engaging in a pattern of lack of candor. Thus, on information and belief, persons involved with the prosecution of the '559 patent, including Mr. Tripathi, Mr. Clauberg, and/or Signify in-house prosecution counsel, including Mr. Kraus, withheld U.S. Patent Application Publication No. US 2002/0176262 from the United States Patent Office with the specific intent to deceive the United States Patent Office in order to obtain impermissibly broad coverage because obtaining broader and longer patent coverage would be integral to its patent strategy.

55. Reggiani's investigation is ongoing. Reggiani believes that through discovery it will uncover additional evidence confirming, supporting, and/or explaining Signify's deceptive intent and it reserves the right to make additional contentions regarding the unenforceability of the patents in suit consistent with the Federal Rules of Civil Procedure, the local rules and any schedule entered in this action.

56. Accordingly, pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202, Reggiani seeks judgment from this Court that the '138 and '559 patents are unenforceable for inequitable conduct.

PRAYER FOR RELIEF

WHEREFORE, Reggiani prays for the following relief:


- a) that this Court enter a declaratory judgment pursuant to 28 U.S.C. § 2201 that the claims of the '604, '138, '518, '328, and '559 patents are invalid;
- b) that this Court enter a declaratory judgment that Reggiani has not infringed, either literally or under the doctrine of equivalents, any claims of the '604, '138, '518, '328, and '559 patents;
- c) that this Court enter a declaratory judgment pursuant to 28 U.S.C. § 2201 that the patents in suit are unenforceable against Reggiani for patent misuse;
- d) that this Court enter a declaratory judgment pursuant to 28 U.S.C. § 2201 that the '138 and '559 patents are unenforceable for inequitable conduct;
- e) that this Court deny the relief sought by Signify's Amended Complaint and Prayer for Relief;
- f) that this Court deem this an exceptional case under 35 U.S.C. § 285 and award Reggiani its costs and reasonable attorneys' fees;
- g) that this Court award Reggiani any and all other and further relief that the Court deems just and proper.

JURY DEMAND

Reggiani respectfully demands a jury trial on all the issues so triable.

Dated: May 23, 2019
New York, New York

WUERSCH & GERING LLP

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Illuminazione*

CERTIFICATE OF SERVICE

I hereby certify that on May 23, 2019, I electronically filed the foregoing with the Clerk of the District Court via the CM/ECF system, and thereby caused the foregoing to be served electronically upon all registered CM/ECF participants in this case.

Dated: May 23, 2019

/s/ Maria Luisa Palmese

Maria Luisa Palmese